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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,251	01/09/2002	Katsumasa Harada	740709-493	8831
22204	7590	07/06/2005		
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			EXAMINER COLEMAN, BRENDA LIBBY	
			ART UNIT 1624	PAPER NUMBER

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/030,251

Applicant(s)

HARADA ET AL.

Examiner

Brenda L. Coleman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,5,7,10,11 and 14-22 is/are pending in the application.  
4a) Of the above claim(s) 10,11 and 14-22 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4,5 and 7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1, 2, 4, 5, 7, 10, 11 and 14-22 are pending in the application.

This action is in response to applicant's amendment filed April 20, 2005. Claim 1 has been amended and claim 9 has been canceled.

### ***Response to Amendment***

Applicant's amendments and arguments filed April 20, 2005 have been fully considered with the following effect:

1. With regards to the 35 U.S.C. § 102(b) anticipation rejection of claims 1, 2, 4, 5, 7 and 9 by BENNETT labeled paragraph 5) in the last office action, the applicant's amendments and remarks have been fully considered but they are not persuasive. The applicants' stated that independent claim 1 has been amended to recite "wherein the step of reacting the nitrobenzene compound of formula (1) with the thiosalicylic acid compound of formula (2) is conducted in a solvent selected from the group consisting of water, amide solvents, aliphatic alcohols, ketones, and nitriles". Bennett is directed towards reacting the methylester of thiosalicylic acid compound with the nitrobenzene compound in a non-polar solvent such as xylene. In view of the amendment to independent claim 1, claims 1, 2 and 4 are withdrawn from the rejection. The applicants' also stated that independent claims 1 and 5 comprises three (3) steps for the preparation of the dibenzothiazepine from a thiosalicylic acid a compound of formula (2) and Bennett comprises five (5) steps for the preparation of the dibenzothiazepine from a thiosalicylic acid compound of formula (III). However the difference in the number of steps is not on point since the claims of the instant invention are such that

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the process of preparing the dibenzothiazepine compounds of formula (5) **comprises** the steps of which is open ended and may be anticipated by processes which contains the steps specifically disclosed and then some. Bennett teaches the process of preparing dibenzothiazepine compounds of formula (5) as defined in independent claim 5 where the compounds of formula (3) are reacted in the presence of a compound selected from the group consisting of Raney-nickel, a ferrous salt, palladium/carbon, palladium/barium sulfate, a palladium compound and platinum compound to obtain a compound of formula (4), which is subjected to dehydration-condensation reaction to obtain the compounds of formula (5) as shown in the reaction of formula V to formula VI and then to formula VII with a dehydrating agent, such as phosphorus pentaoxide.

Claims 5 and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by BENNETT et al., Organic Preparations and Procedures Int., for reasons of record and stated above.

2. With regards to the 35 U.S.C. § 102(b) anticipation rejection of claims 1, 2, 4, 5, 7 and 9 by KUTI, labeled paragraph 6) in the last office action, the applicant's amendments and remarks have been fully considered but they are not persuasive. The applicants' stated that independent claims 1 and 5 comprises three (3) steps for the preparation of the dibenzothiazepine from a thiosalicylic acid compound of formula (2) and KUTI comprises four (4) steps for the preparation of the dibenzothiazepine from a thiosalicylic acid compound 11. However the difference in the number of steps is not on point since the claims of the instant invention are such that the process of preparing the dibenzothiazepine compounds of formula (5) **comprises** the steps of which is open

ended and may be anticipated by processes which contains the steps specifically disclosed and then some.

Claims 1, 2, 4, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by KUTI et al., Phosphorus, Sulfur and Silicon, for reasons of record and stated above.

3. With regards to the 35 U.S.C. § 103(a) obviousness rejection of claims 1, 2, 4, 5, 7 and 9 over BENNETT et al., labeled paragraph 7) in the last office action, the applicant's amendments and remarks have been fully considered but they are not persuasive. The applicants' stated that Bennett and Kuti fail to teach all the features of independent claims 1 and 5 and that the claimed process is advantageous over the Bennett process and Kuti process with respect to number of the steps involved in the process starting from the thiosalicylic acid compound is reacted with a nitrobenzene compound. However, as pointed out above in response to the anticipation rejection, the claims are not limited to just those steps specifically defined, comprises is open claim language.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al., Organic Preparations and Procedures Int., for reasons of record and stated above.

4. With regards to the 35 U.S.C. § 103(a) obviousness rejection of claims 1, 2, 4, 5, 7 and 9 over KUTI et al., labeled paragraph 8) in the last office action, the applicant's amendments and remarks have been fully considered but they are not persuasive. The applicants' stated that Bennett and Kuti fail to teach all the features of independent

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claims 1 and 5 and that the claimed process is advantageous over the Bennett process and Kuti process with respect to number of the steps involved in the process starting from the thiosalicylic acid compound is reacted with a nitrobenzene compound.

However, as pointed out above in response to the anticipation rejection, the claims are not limited to just those steps specifically defined, comprises is open claim language.

Claims 1, 2, 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over KUTI et al., Phosphorus, Sulfur and Silicon, for reasons of record and stated above.

#### ***Election/Restrictions***

5. Claims 10, 11 and 14-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the paper filed January 12, 2004.

#### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda L. Coleman whose telephone number is 571-272-0665. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Brenda L. Coleman  
Primary Examiner Art Unit 1624  
July 1, 2005